

(REFERENCE COPY - Not for submission)

# Modification of a Licensed Facility for DTS Application

File Number: 0000029742 | Submit Date: 09/08/2017 | Call Sign: WUNF-TV | Facility ID: 69300 | FRN: 0001910066

State: North Carolina City: ASHEVILLE

Service: DTS Purpose: Minor Modification BLEDT-20120615ACE Status: Granted Status Date: 09/27/2017

Expiration Date: **03/09/2020** Filing Status: **InActive** 

### General Information

Section	Question	Response
Attachments	Are attachments (other than associated schedules) being filed with this application?	Yes

### Fees, Waivers, and Exemptions

Section	Question	Response
Waivers	Does this filing request a waiver of the Commission's rule(s)?	No
	Total number of rule sections involved in this waiver request:	
	Are the frequencies or parameters requested in this filing covered by grandfathered privileges, previously approved by waiver, or functionally integrated with an existing station?	No

## Applicant Information

#### **Applicant Name, Type, and Contact Information**

Applicant	Address	Phone	Email	Applicant Type
UNIVERSITY OF NORTH CAROLINA Doing Business As: UNIVERSITY OF NORTH CAROLINA	P.O. BOX 14900 RESEARCH TRIANGLE PARK, NC 27709 United States	+1 (919) 549-7000	fcc_notice@unctv. org	Government Entity

#### **Authorization Holder Name**

Check box if the Authorization Holder name is being updated because of the sale (or transfer of control) of the Authorization(s) to another party and for which proper Commission approval has not been received or proper notification provided.

#### Contact Representatives (4)

Contact Name	Address	Phone	Email	Contact Type
Joseph M. Davis , P.E Consulting Engineer Chesapeake RF Consultants, LLC	207 Old Dominion Road Yorktown, VA 23692 United States	+1 (703) 650-9600	Joseph.Davis@RF-consultants.com	Technical Representative
Stephen Hartzell Brooks, Pierce et al.	150 Fayetteville Street Suite 1700 Raleigh, NC 27601 United States	+1 (919) 839-0300	shartzell@brookspierce. com	Legal Representative
Donald W Smith University of North Carolina	P.O. BOX 14900 10 T.W. ALEXANDER DRIVE RESEARCH TRIANGLE PARK, NC 27709 United States	+1 (919) 549-7025	DSMITH@UNCTV.ORG	Technical Representative
Marcus W Trathen Brooks, Pierce et al.	150 Fayetteville Street Suite 1700 RALEIGH, NC 27601 United States	+1 (919) 839-0300	mtrathen@brookspierce. com	Legal Representative

#### Alien Ownership

Question	Response
1) Is the applicant a foreign government or the representative of any foreign government as specified in Section 310(a) of the Communications Act?	
2) Is the applicant an alien or the representative of an alien? (Section 310(b)(1))	
3) Is the applicant a corporation, or non-corporate entity, that is organized under the laws of any foreign government? (Section 310(b)(2))	
<b>4)</b> Is the applicant an entity of which more than one-fifth of the capital stock, or other equity or voting interest, is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any entity organized under the laws of a foreign country? (Section 310(b)(3))	
5) Is the applicant directly or indirectly controlled by any other entity of which more than one-fourth of the capital stock, or other equity or voting interest, is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any entity organized under the laws of a foreign country? (Section 310(b)(4))	
6) Has the applicant received a declaratory ruling(s) under Section 310(b)(4) of the Communications Act?	
<b>6a)</b> Enter the citation of the applicable declaratory ruling by DA/FCC number, FCC Record citation, release date, or any other identifying information.	
7) Has there been any change in the applicant's foreign ownership since issuance of the declaratory ruling(s) cited in response to Question 6?	
<b>7a)</b> Enter the File or Docket Number of the Petition for Declaratory Ruling that the applicant has filed for its foreign ownership in connection with this application pursuant to Section 310(b)(4) of the Communications Act. It is not necessary to file a request for a foreign ownership declaratory ruling if the applicant attaches a showing that the requested authorization(s) is exempt from the provisions of Section 310(b)(4).	
8) Does the applicant certify that it is in compliance with the terms and conditions of the foreign ownership declaratory ruling(s) cited in response to Question 6?	
9) In connection with this application, is the applicant filing a foreign ownership Petition for Declaratory Ruling pursuant to Section 310(b)(4) of the Communications Act?	

## Basic Qualifying Questions

Section	Question	Response
Revoked Application	Has the Applicant or any party to this application had any FCC station Authorization revoked or had any application for an initial, modification or renewal of FCC station Authorization denied by the Commission?	No
State or Federal Convictions	Has the Applicant or any party to this application, or any party directly or indirectly controlling the Applicant, ever been convicted of a felony by any state or federal court?	No

# Channel and Facility Information

Section	Question	Response
Facility ID	69300	
State	North Carolina	
City	ASHEVILLE	
DTS Channel	20	
Facility Type	Facility Type	Noncommercial Educational
	Station Type	Main
Zone	Zone	2

### **DTS Reference Point**

Section	Question	Response
Construction Permit File	File Number for Current Authorized Service Area:	BLEDT-20120615ACE
Number and Facility ID	Facility ID	69300
Coordinates (NAD83)	Latitude	35° 13′ 20.0″ N+
	Longitude	082° 32' 58.0" W-

### Site 1: Antenna Location Data

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1023079
Coordinates (NAD83)	Latitude	35° 13' 20.0" N+
	Longitude	082° 32' 58.0" W-
	Structure Type	TOWER-A free standing or guyed struct
	Overall Structure Height	220.0 meters
	Support Structure Height	205.0 meters
	Ground Elevation (AMSL)	1044.0 meters
Antenna Data	Height of Radiation Center Above Ground Level	210.9 meters
	Height of Radiation Center Above Average Terrain	550.7 meters
	Height of Radiation Center Above Mean Sea Level	1254.9 meters
	Effective Radiated Power	1000 kW

### Site 1: Antenna Technical Data

Section	Question	Response	
Antenna Type	Antenna Type	Directional Custom	
	Do you have an Antenna ID?	No	
	Antenna ID	1002018	
Antenna Manufacturer and	Manufacturer:	DIE	
Model	Model	TFU-19ETT/VP-R C170	
	Electrical Beam Tilt	1	
	Mechanical Beam Tilt	Not Applicable	
	toward azimuth		
	Polarization	Elliptical	
DTV and DTS: Elevation Pattern	Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	No	
	Rotation	0 degrees	
	Uploaded file for elevation antenna (or radiation) pattern data		

#### **Directional Antenna Relative Field Values (Pre-rotated Pattern)**

Degree	Value	Degree	Value	Degree	Value	Degree	Value
0	0.940	90	0.899	180	0.940	270	0.245
10	0.987	100	0.900	190	0.854	280	0.232
20	1.000	110	0.905	200	0.733	290	0.201
30	0.988	120	0.917	210	0.588	300	0.218
40	0.963	130	0.936	220	0.437	310	0.302
50	0.936	140	0.963	230	0.302	320	0.437
60	0.917	150	0.968	240	0.218	330	0.588
70	0.905	160	1.000	250	0.207	340	0.730
80	0.900	170	0.987	260	0.232	350	0.854

#### **Additional Azimuths**

Degree	$V_{A}$
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### Site 2: Antenna Location Data

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	No
	ASR Number	
Coordinates (NAD83)	Latitude	35° 28' 25.4" N+
	Longitude	083° 19' 22.5" W-
	Structure Type	TOWER-A free standing or guyed struct
	Overall Structure Height	30 meters
	Support Structure Height	30 meters
	Ground Elevation (AMSL)	735 meters
Antenna Data	Height of Radiation Center Above Ground Level	19 meters
	Height of Radiation Center Above Average Terrain	-144.8 meters
	Height of Radiation Center Above Mean Sea Level	754 meters
	Effective Radiated Power	1.73 kW

### Site 2: Antenna Technical Data

Section	Question	Response
Antenna Type	Antenna Type	Directional Custom
	Do you have an Antenna ID?	No
	Antenna ID	1002019
Antenna Manufacturer and	Manufacturer:	KAT
Model	Model	2x2 750 10325
	Electrical Beam Tilt	Not Applicable
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Elliptical
DTV and DTS: Elevation Pattern	Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	No
	Rotation	90 degrees
	Uploaded file for elevation antenna (or radiation) pattern data	

#### **Directional Antenna Relative Field Values (Pre-rotated Pattern)**

Degree	Value	Degree	Value	Degree	Value	Degree	Value
0	0.955	90	0.479	180	0.124	270	0.457
10	0.895	100	0.338	190	0.079	280	0.620
20	0.775	110	0.232	200	0.037	290	0.794
30	0.789	120	0.148	210	0.109	300	0.941
40	0.913	130	0.101	220	0.124	310	1.000
50	0.988	140	0.106	230	0.103	320	0.934
60	0.940	150	0.094	240	0.143	330	0.788
70	0.807	160	0.031	250	0.229	340	0.742
80	0.640	170	0.080	260	0.329	350	0.861

#### **Additional Azimuths**

Degree	V <sub>A</sub>
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# Parties to the Application (0)

Information not provided.

### Attributable Interest

Section	Question	Response
Equity and Financial Interests	Applicant certifies that equity and financial interests not set forth by the applicant parties are non-attributable.	
Other Authorizations	Does the applicant or any party to the application have an attributable interest in any other broadcast station(s).	

#### Construction Permit Certifications

Section	Question	Response
Post-Incentive Auction Expedited Processing	It will operate on the DTV channel for this station as established in the post-incentive auction channel reassignment public notice.	Yes
	It will operate post-incentive auction facilities that do not expand the noise-limited service contour in any direction beyond that established by the post-incentive auction channel reassignment public notice.	No
	It will operate post-incentive auction facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the post-incentive auction channel reassignment public notice.	Yes
	The antenna structure to be used by this facility has been registered by the Commission and will not require reregistration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely affect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7.	Yes
Environmental Effect	Would a Commission grant of Authorization for this location be an action which may have a significant environmental effect? (See 47 C.F.R. Section 1.1306)	No
Broadcast Facility	The proposed facility complies with all of the following applicable rule sections. 47 C.F.R. Sections 74.709, 74.793 (e), 74.793(f), 74.793(g), 74.793(h)	Yes
Interference Protection Provisions	The proposed TV station satisfies the interference protection provisions of 47 C.F.R. Section 73.626.	Yes
DTS Facility Requirements	The combined coverage from all of the DTS transmitters in the proposed DTS facility covers all of the station's authorized service area, as required in 47 C.F.R. Section 73.626(f)(1).	No
	Each DTS transmitter's coverage is contained within either the TV station's Table of Distances area (47 C.F.R. Section 73.626 (c)) or its authorized service area, except where such coverage is of a minimal amount and necessary to meet the requirements of 47 C.F.R. Section 73.626(f)(1).	Yes, coverage entirely contained within station s authorized service area
	Each DTS transmitter's coverage is contiguous with at least one other DTS transmitter's coverage, as required in 47 C.F. R. Section 73.626(e)(3).	Yes
	The coverage from one or more DTS transmitter(s) in the DTS facility provide(s) principal community coverage, as required in 47 C.F.R. Section 73.626(e)(4).	Yes, one transmitter provides principal community coverage
	The combined field strength of all of the DTS transmitters in the proposed DTS facility do not cause interference to another station in excess of the criteria specified in 47 C.F. R. Section 73.616, as required in 47 C.F.R. Section 73.626 (e)(5).	Yes
	Note: The combined field strength level shall be determined by a "root-sum-square" calculation, where the combined field strength level at a given location is equal to the square root of the sum of the squared field strengths from each transmitter in the DTS network at that location.	

Each DTS transmitter in the proposed DTS facility is located Wes within either the TV station's Table of Distances area or its authorized service area.

#### Legal Certifications

Section	Question	Response
Eligibility	The applicant certifies that it is a:	
	The applicant certifies that the applicant's officers, directors and members of its governing board are broadly representative of the educational, cultural, and civic segments of the principal community to be served.	
	The applicant certifies that the Commission has previously granted a broadcast application identified here by file number that found this applicant qualified as a noncommercial educational entity with a qualifying educational program, and that the applicant will use the proposed station to advance a program similar to that the Commission has found qualifying in applicant's previous application.	
	FCC File Number	
	The applicant certifies that its governing documents (e.g., articles of incorporation, by-laws, charter, enabling statute, and/or other pertinent organizational document) permit the applicant to advance an educational program and that there is no provision in any of those documents that would restrict the applicant from advancing an educational program or complying with any Commission rule, policy, or provision of the Communications Act of 1934, as amended.	
Character Issues	Applicant certifies that neither applicant nor any party to the application has or had any interest in, or connection with:  (a) any broadcast application in any proceeding where character issues were left in unresolved or were resolved adversely against the applicant or party to the application; or	
	<ul><li>(b) any pending broadcast application in which character issues have been raised.</li></ul>	
Adverse Findings	Has the Applicant or any party to this application had an adverse finding or an adverse final action taken by any court or administrative body in a civil or criminal proceeding brought under any law related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination?	
Program Service Certification	Applicant certifies that it is cognizant of and will comply with its obligations as a Commission licensee to present a program service responsive to the issues of public concern facing the station's community of license and service area.	
Local Public Notice	Applicant certifies that it has or will comply with the public notice requirements of 47 C.F.R. Section 73.3580.	
Equal Employment Opportunity (EEO)	If the applicant proposes to employ five or more full-time employees, applicant certifies that it is filing simultaneously with this application a Model EEO Program Report.	
Holding Period	Applicant certifies that this application does not propose a modification to an authorization that was awarded on the basis of a preference for fair distribution of service pursuant to 47 U.S.C. Section 307(b).	Yes
	Applicant certifies that the proposed modification will not downgrade service to the area on which the Section 307(b) preference was based.	

Applicant certifies that although it proposes to downgrade service to the area on which the Section 307(b) preference was based, applicant has provided full service to that area for a period of four years of on-air operations.	
Applicant certifies that this application does not propose a modification to an authorized station that received a credit for superior technical parameters under the point system selection method in 47 C.F.R. Section 73.7003.	Yes
Applicant certifies that the population and area within the proposed service contour (60 dBu (FM) or Noise-Limited (TV)) are greater than or equivalent to those authorized.	

#### Certification

Section	Question	Response
General Certification Statements	The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by authorization or otherwise, and requests an Authorization in accordance with this application (See Section 304 of the Communications Act of 1934, as amended.).	
	The Applicant certifies that neither the Applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. §862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR . See §1. 2002(b) of the rules, 47 CFR §1.2002(b), for the definition of "party to the application" as used in this certification §1.2002 (c). The Applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of this application, and are true, complete, correct, and made in good faith.	
Authorized Party to Sign	FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID  Upon grant of this application, the Authorization Holder may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in automatic cancellation of the Authorization. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of Authorization requested in this application.  WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. Code, Title 18, §1001) AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).	
	I certify that this application includes all required and relevant attachments.	Yes
	I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.	Thomas Brooks Skinner Associate General Manager and General Counsel
		09/08/2017

#### **Attachments**

File Name	Uploaded By	Attachment Type	Description
WUNF-TV Exhibit Demonstrating First Priority Window Eligibility.pdf	Applicant	All Purpose	Exhibit Demonstrating First Priority Window Eligibility
WUNF-TV Interference Consent.pdf	Applicant	Fees, Waivers and Exemptions	Interference Consent
WUNF-TV reassignment initial minor mod DTS application ENG 09-08-2017.pdf	Applicant	All Purpose	WUNF-TV DTS priority CP application for repack Ch-20